

REMARKS/ARGUMENT

Claims 1-4 are pending. Claim 1 is the only independent claim.

Claims 1, 2 and 4 were rejected under 35 U.S.C. § 103 over U.S. Patent 5,815,046 (Spilker, Jr. et al.). Applicant traverses and submits that independent claim 1 is patentable for at least the following reasons.

Independent claim 1 is directed to a multi-rate transmission apparatus in which a coding ratio is varied in accordance *with an input modulation operation* mode to allow a transmission operation with a single input clock signal for any *input* modulation mode. The apparatus comprises: data processing means for reading in data having a bit width suitable for a modulation system corresponding to the input modulation mode, coding means for performing coding processing parallelly for the data read in by the data processing means, and transmission means for transmitting the data, for which the coding processing has been performed, in accordance with the modulation system and the varied coding ratio.

As a result of the recited structure, transmission operation can be effected on the basis of a single input clock signal, even when the modulation mode *is varied*. Thus, even if the modulation system or the coding rate is varied to raise the data transfer rate, circuit operation and transmission operation can be performed always with the single clock signal.

As can be seen from the above, in claim 1, the modulation mode is variable, in particular, variable in accordance with *an input modulation mode*. In the disclosed embodiment, the modulation mode can be input by use of the mode input terminal 102, discussed in the specification at pages 7-8 and shown in Figure 1.

Spilker, Jr. et al. describes a system in which, depending on the modulation technique used by the system, data is converted by the serial/parallel converter to words of appropriate size to match the modulation. However, there is no teaching or suggestion that the modulation mode is varied in accordance *with an input modulation mode*. No structure is provided in the figure of Spilker, Jr. et al. that corresponds, for example, to the modulation operation mode terminal 102. Thus, no teaching is provided that would allow for a modulation mode *to be input*, or to be varied in accordance with an input, as is claimed.

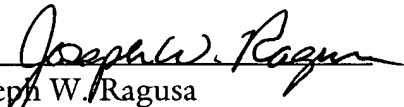
The discussion in Spilker, Jr. et al., at col. 2, lines 13-21 concerning data conversion by the serial/parallel converter relate to a modulation mode that is *preset in accordance with the design of the system*, and which could be any one of the modulation modes discussed at columns 1 and 2. No structure is provided, in the figure or the description, for an input to the system that would allow for the modulation mode to be varied, as in claim 1. For at least this reason, claim 1 is believed patentable over Spilker, Jr. et al.

The other claims in this application are each dependent from independent claim 1 discussed above and have been indicated as allowable.

In view of the foregoing remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

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Respectfully submitted,

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